



Title: **Regulated Medical Waste Management**

EH&S – 8-4

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PURPOSE: To establish responsibilities, work practices, and systematic procedures for handling, packaging, collection, treatment, and disposal of regulated medical waste. The policy is designed to protect people, equipment, property, and the environment by safely controlling regulated medical waste materials from the point of generation to disposal according to the federal, state and local governmental regulations.

SCOPE: Hospital Wide.

DEFINITIONS:

Regulated medical waste (RMW): any waste which is generated in the diagnosis, treatment or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals, when listed by the Department of Environmental Conservation (see Section 27-1502 of the Environmental Conservation Law), provided, however, that RMW shall not include any hazardous waste identified or listed by the Department of Environmental Conservation, or any household waste as defined by the Department of Environmental Conservation and shall include the following:

Cultures and stocks of infectious agents and associated biologicals, wastes from the production of biologicals, discarded live and attenuated vaccines, and culture dishes and devices used to transfer, inoculate, and mix cultures.

Human pathological wastes, including tissues, organs, body parts and body fluids that are removed during surgery or autopsy or other medical procedures, and specimens of body fluids and their containers.

Waste human blood and products of blood, including serum, plasma, and other blood components and their containers. This category also includes containers or materials discarded saturated with free flowing blood or blood components.

Sharps that have been used in animal or human patient care or in laboratories (clinical /research / pharmaceutical), including hypodermic or intravenous needles, syringes, Pasteur pipettes, broken glassware (slides and cover slips), scalpel blades, blood vials, test tubes, needles with attached tubing, disposable staples, and explanted orthopedic hardware.

Contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research, production of

biologicals, or testing of pharmaceuticals with infectious agents, provided that such waste can serve as a means of transmission of the infectious agent.

Wastes from surgery or autopsy that were in contact with infectious agents, including soiled dressings, sponges, drapes, lavage tubes, drainage sets, under pads, and surgical gloves.

Laboratory wastes from clinical laboratories that were in contact with infectious agents, including slides and cover slips, disposable gloves, laboratory coats and aprons.

Dialysis wastes that were in contact with the blood of patients undergoing hemodialysis or renal dialysis, including contaminated disposable equipment and supplies such as tubing, filters, disposable sheets, towels, gloves, aprons and laboratory coats.

Biological waste and discarded materials contaminated with blood, excretion, exudates or secretion from human beings or animals who are isolated to protect others from highly communicable diseases.

Infectious Agents: organisms that cause disease in humans.

Storage: the containment of RMW in such a manner as not to constitute disposal of such waste.

Transport: the movement of RMW from the generator's facility site to any intermediate points and finally to the point of ultimate disposal.

Treatment: shall mean any method, technique or process designed to change the character or composition of any RMW so as to either neutralize such waste or to render such waste not infectious, safer for transport, amenable for recovery, amenable for storage or reduced in volume.

I. RESPONSIBILITIES:

A. Department of Environmental Health and Safety

- a) Provide technical assistance and support regarding occupational health and safety matters relating to RMW management.

B. Waste Generator

A generator of RMW is defined as any person who discards RMW. To ensure the safety of all individuals who may come into contact with waste, the generator shall:

- a) Properly identify, segregate, handle, label, and store RMW for collection, transportation,

treatment, and disposal as defined in this policy.

- b) Insure that all waste packaging, handling, and storage procedures of completed containers contain RMW is free from contamination and physical hazards prior to removal from the work area.

C. Departments

All Departments must comply with this policy.

D. University Hospital Satellite Facilities

All satellite facilities are responsible for coordinating and managing the regulated medical waste generated at their facility. Any questions can be directed to the Offsite Environment of Care Coordinator at 4-4066.

E. Hospital Custodial Services

- a) Coordinate the RMW management program.
- b) Schedule collection of RMW and transport it to the appropriate area for pick up.
- c) Clean up spills involving blood and other RMW.

F. Regulated Medical Waste Contractor

This Contractor collects the generated RMW from the University Hospital designated area(s) and transports the same in accordance with Department of Transportation regulations to the vendor's site.

II. REGULATED WASTE HANDLING PROCEDURES:

A. Hospital Staff Work Practices:

- i. Gloves must always be worn and must be changed when they become soiled.
- ii. Hand washing practices must be followed after hand contact with any potentially infectious material.
- iii. Protective equipment such as a gown, mask and protective eye wear must be worn when there is the potential of contact with splashed or sprayed body fluids. Head and face protection is needed any time the procedure might generate airborne droplets of body fluids.
- iv. Gowns and personal protective equipment must be removed when they become soiled and when you leave the work area. Soiled garments must be placed in the appropriate container.
- v. All disposable materials saturated with blood and blood-containing body fluid must be placed in red bags. Do not place in normal trash containers.

- vi. Spills must be cleaned immediately by Hospital Custodial Services or other trained staff using a Hospital approved disinfectant (HAD). If a piece of equipment is to leave the area for repair, it must be cleaned to avoid exposing personnel in Biomedical Engineering.
- vii. If an employee has cuts, lesions or dermatitis, they must use the appropriate personal protective equipment (i.e. gloves).
- viii. Eating, drinking, applying cosmetics, applying lip balms, or handling contact lenses in any area where there might be a potential of contact with body fluids is not allowed.
- ix. No food or drink can be stored in refrigerators or other places where infectious material is present must be allowed. All refrigerators containing infectious materials must be labeled with as "BIOHAZARD".
- x. Never recap, break or reuse needles. All needles should be disposed in the sharps disposal containers provided in all patient care areas and laboratories.

B. Waste Segregation, Packaging and Initial Disposal:

Regulated Medical Waste:

RMW must be placed in a red bag appropriately labeled as "BIOHAZARD". Waste which has a strong potential for leakage must be placed into **double bags** and the outer bag must be red in color. Items such as IV tubing or containers which contain small amounts (<20cc, or <4 teaspoons) of fluids (blood) may be disposed of in this manner. Large amounts of fluids (>20 cc, or >4 teaspoons) cannot be disposed of in this manner (see section on "Liquid Waste").

The bags must be tied or otherwise secured so as to prevent leakage during storage, handling and transport. The red bags will be removed from the area by Hospital Custodial Services, and transported in containers that are labeled as "Regulated Medical Waste". The transporters will be taken to the designated area of the hospital where RMW will be staged for pick up by the Licensed Contractor. These containers must be kept closed while transporting the red bags. Containers are removed from the loading dock by the Licensed Contractor.

All RMW must be segregated into the proper waste category, and into a properly labeled containment system at the point of generation.

Cultures:

Solid waste: Items such as cloth, gloves, plastic, and paper items that have been exposed to agents infectious or hazardous to humans or animals shall be placed in red biohazard bags. For liquid cultures refer to the section on liquid waste. This microbiological waste, including plates, tubes and other medical waste will be placed in the grey containers located in the appropriate laboratories. These containers are lined with plastic bags and are removed by the Licensed Contractor.

Sharps:

All sharps must be disposed of in puncture resistant sharps containers. Appropriate sharp containers are provided, in the following locations, by Hospital Custodial Services:

- Patient Rooms, Treatment and Examination Rooms, Medication Carts, Crash Carts, Operating Rooms, Clean Utility Rooms and Soiled Utility Rooms and other patient care areas. These will be collected by an outside contractor for disposal. In the event a sharps container is filled before the scheduled removal date, Hospital Custodial Services should be contacted at 4-1455 for a replacement. If an area is missing a container or additional containers are needed on a permanent basis, contact Hospital Custodial Services to resolve the situation.
- Laboratories: Sharps that are generated in the laboratories must be disposed of in reusable or disposable sharps containers.

NOTE: *Needles and syringe units should be discarded as a unit without clipping, bending, breaking, shearing, or recapping.*

Liquid waste:

Liquid wastes that contain infectious agents (e.g., culture media, blood, body fluids), can be disposed of in a sanitary sewer (i.e. toilet or hopper, but not the hand washing sink) by personnel wearing appropriate personal protective equipment (impervious gloves, gown and eye/face protection).

Pathological Waste:

Tissue and anatomical parts from Pathology may be placed into leak-proof waste bags, and placed in a fiber drum or other RMW container and brought to the medical waste transfer area for final disposal by the Licensed Contractor.

Operating Room:

The Operating Room Housekeeping staff will transport containers of red bags to the hospital's designated area. Liquid waste can be treated as discussed above.

Radioactive Regulated Medical Waste:

RMW which is also radioactive will be disposed of in red bags and segregated from other waste. These bags will be surveyed by Radiation Protection Services prior to disposal.

NOTE: In certain cases, EH&S and Healthcare Epidemiology may direct alternate methods of RMW disposal.

C. Spill Clean-up Procedures:

Hospital Custodial Services staff is responsible for cleaning spills involving blood or other RMW. Procedures for clean up of spills are outlined in the Hospital Custodial Services Policy, VI-5, "Cleaning Spills".

D. Training

- i. All areas affected by this policy will conduct either in-service training under the guidance of Healthcare Epidemiology or Healthcare Epidemiology will provide training for affected staff regarding the handling and disposal of RMW.
- ii. The training will include, at a minimum:
 - a. The proper segregation, handling, packaging and disposal of RMW.
 - b. The proper use of personal protective equipment for handling infectious waste/material.
 - c. Bloodborne Pathogen awareness

E. Final Disposal Methods

- i. All red bags and infectious agents will be collected and disposed of as RMW.
- ii. Hospital Custodial Services will ensure proper packaging and disposal.
- iii. Any general waste which is found to contain RMW will be handled as RMW.
- iv. When a violation of policy is identified by Hospital Custodial Services, a report of the violation will be generated using the Housekeeping Refuse Inspection Form and immediate notification will be given to the area supervisor to review with appropriate staff.
- v. RMW which must be incinerated (e.g. CJD waste) will be labeled "For Incineration Only".
- vi. The general refuse will contain only food service waste, trash, wrappings and packaging, and other non-RMW items not defined by this policy.
- vii. All RMW will be disposed of through a licensed transporter for final disposal at a permitted facility.

INQUIRIES/REQUESTS:

Environmental Health and Safety
HSC L1, 059
Z=8017
Main Office: 444-6783
Fax: 444-6845

RELATED FORMS:

Housekeeping Refuse Inspection Form

RELATED DOCUMENTS:

Examples of RMW (Appendix A)

Regulated Medical Waste Disposal, Hospital Custodial Services, Policy V-1

Collection of Regulated Medical Waste, Hospital Custodial Services, Policy V-2

Certification of Regulated Medical Waste Carter Compliance, Hospital Custodial Services, Policy V-4

Cleaning Spills, Hospital Custodial Services, Policy VI-5

Employee Exposure to BBP-Immediate Response, Infection Control, Policy 5.6

Hazardous Drugs Management, EH&S Policy 8-5

Chemical Hazardous Waste Management, EH&S Policy 8-1

Precautions to be Maintained for Patients with Creutzfeldt-Jakob Disease or Suspected CJD, OR, Policy C:9

OSHA Occupational Exposure to Bloodborne Pathogen Standard, 29 CFR 1910.1030

NYS Department of Environmental Conservation's 6NYCRR Part 364 regulations

NYS Department of Health 10NYCRR Part 70 regulations

CDC/NIH Biosafety in Microbiological and Biomedical Laboratories, 4th edition.

APPENDIX A - Examples of Regulated Medical Waste**1. Cultures and Stocks**

- a. Cultures and stocks from medical and pathological laboratories, including bacterial cultures, viral cultures, fungal cultures, throat cultures, mucous cultures, exudates cultures, lung fluid cultures, pleural fluid cultures, synovial fluid cultures, and cerebrospinal fluid cultures.
- b. Culture media that has come in contact with infectious materials, including agar gel, nutrient broth, discarded media from cultures and blood agar.
- c. Cultures and stocks of infectious agents from research and industrial laboratories, including tissue culture materials from human cell lines, human blood and blood products, impure animal cell lines, preparations made from living organisms and their products, including vaccines, cultures, etc, intended for use in diagnosis, immunizing or treating human beings or animals or in research pertaining thereto.
- d. Clean up materials such as absorbents and paper towels from culture and stock mixing.
- e. Biologicals such as medicinal preparations made from living organisms and their products, including serums, vaccines, antigens and antitoxins.
- f. Culture dishes, flasks and devices used to transfer, inoculate, and mix cultures, such as tissue culture plates, assay plates, test tubes, centrifuge tubes, cotton swabs, pipettes, pipette tips, stirring jars, spatulas, inoculation loops, wires, corks, stoppers, cell scrappers, cell lifters, paraffin sealing paper, foil, cotton, filters, mixing sticks, tubing, etc, that have come in contact with infectious materials.

2. Sharps

- a. Glassware, including pasteur pipettes, glass, glass culture dishes, blood vials, glass beakers, glass flasks, glass test tubes, slides, and cover slips that have come in contact with infectious materials.
- b. Plastic ware, including broken rigid plastic items, broken plastic culture dishes and flasks, plastic pipettes, and unopettes that have come in contact with infectious materials.
- c. Syringes, including hypodermic needles, whether or not they have come in contact with infectious materials.
- d. Other materials capable of puncturing, including scalpel blades, suture needles, surgical needles, lancets, surgical staples, and instruments designed for cutting and puncturing such as bone saws, scissors, tweezers, etc, that have come in contact with

infectious materials.

NOTE: If these items have not come in contact with infectious materials, they must be disposed of in a rigid, puncture resistant container for disposal as municipal waste.

3. Items those are **not** included as RMW
 - a. Items that would be considered "household" waste are not considered RMW. Examples include diapers and feminine hygiene products.
 - b. Contaminated linen should not be disposed of as RMW as it can be reprocessed using universally accepted precautions.